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TO: Cass Sunstein COPY: Kimberly P. Nelson

DATE: May 10, 2012

RE: Peer Review of Draft 2012 Report to Congress on the Benefits and Costs of

Federal Regulations

I'm delighted to say that – overall – the draft 2012 Report to Congress on the Benefits and Costs of Federal Regulations appears to me to embody sound theory and up-to-date empirical methods, and represents an impressive achievement. It should thereby prove helpful to ongoing assessment of Federal regulation in a variety of areas, including energy and environmental regulations. Unfortunately, due to the limited time I could dedicate to reviewing the document, I have focused my attention on a few parts where I hope I can bring some added-value to your thinking and your potential revisions.

1. There is – appropriately – considerable discussion in the report about the uncertainty that is associated with quantitative estimates of the benefits and costs of regulations. However, I failed to note any discussion of an important reality, namely that methods exist to take this uncertainty into account in ways that are vastly more reliable and useful than simply provision of ranges or execution of sensitivity analysis. I am referring to so-called stochastic net present value analysis, which I seem to recall became part of the OMB Guidelines several years ago. Such Monte Carlo analysis of net benefits is well within the scope, skills, and resources of an agency such as the U.S. Environmental Protection Agency (EPA), and can provide much more useful information to decision-makers. On this, you may wish to consult the following:

Jaffe, Judson, and Robert Stavins. "On the Value of Formal Assessment of Uncertainty in Regulatory Analysis." Regulation and Governance 1(2007):154-171.

- 2. The problem with providing ranges to express uncertainty (see above) is that they may imply to decision-makers a uniform distribution, which is hardly ever the case. For an example of this, see the first bullet point on page 3 (executive summary) of the report.
- 3. Another problem arises in the same bullet point on page 3, where the benefits of all major regulations assessed by OMB are compared with the respective total costs. The key question is whether net benefits are maximized, and for that it is necessary to look at individual rules. For example, below is a table I put together from the OMB analysis of the NAAQS for ozone & particulates during the Clinton administration. EPA packaged

the standards as a pair, but economic analysis indicates very different pictures for the two pollutants.

	Combined Ozone and Particulates	Ozone	Particulates
Annual Benefits	28 - 156	2 - 11	26 - 145
Annual Costs	62	13	49
Net Benefits	30	-7	37

- 4. In the table on page 14, what would be of greatest interest would be the range (if stochastic analysis is not available) of *net benefits*. You provided in the subsequent text for the sum of all Department of Labor rules, but why not provided it for the individual offices (and better yet, individual rules)?
- 5. Again, on page 15, the net benefits of individual rules should be singled out, if possible.
- 6. An excellent reference for the confusion that exists among policy makers, the press, and others regarding VSL is Trudy Cameron's recent article in the *Review of Environmental Economics and Management*.
- 7. On page 37, I would delete entirely the second paragraph regarding the rather soft, advocacy piece by Goodstein (1994), and lead instead with the vastly more credible article by Morgenstern, Pizer, and Shih (2002). Also, Berman and Bui (2001b), which appears in a footnote, might be moved to the text; this is another solid source. For the broader questions that permeate much of this discussion, the two key references may be:
  - Jaffe, Adam B., Steven R. Peterson, Paul R. Portney, and Robert N. Stavins.

    "Environmental Regulation and the Competitiveness of U.S. Manufacturing:

    What Does the Evidence Tell Us?" Journal of Economic Literature 33(1995):132-163.

Pasurka, Carl. "Perspectives on Pollution Abatement and Competitiveness: Theory, Data, and Analyses." *Review of Environmental Economics and Policy*, 2, No. 2 (Summer 2008), 194-218.

I'm afraid this is all I have time for. I apologize for that. I hope at least some of this is helpful.